

**Supplemental Table 2. Incidence rate of in-hospitalization based on cause of kidney disease**

Etiology	Total	Diabetes mellitus	Hypertension	Glomerular disease	Polycystic kidney disease
Follow-up period (person-years)	10,569.82	2,080.96	2,221.40	3,482.98	1,984.82
All-cause hospitalization	184.96	289.77	169.71	122.02	180.87
1. Acute kidney disease	10.88	19.7	8.55	7.46	7.56
2. Infetions	23.46	21.14	23.41	12.35	48.37
3. Neoplasm	21.57	24.51	23.41	24.69	13.6
4. Endocrine-nutrition-metabolic-related cause	14.85	45.17	8.1	4.88	3.02
5. Diseases of blood and blood forming organs	1.61	2.4	2.25	0.86	-
6. Mental illness	1.42	5.29	0.9	-	0.5
7. Disease of the nervous systemn and sense organ	20.72	40.37	18.46	13.49	9.07
8. Diseas of circulatory system	29.23	55.26	26.56	12.06	25.19
9. Disease of respiratory tract	2.65	5.77	2.25	1.15	3.53
10. Disease of digestive system	14.38	17.3	16.21	8.61	20.15
11. Disease of genitourinary system	10.22	7.69	4.5	8.33	22.17
12. Complication of pregnancy	1.32	0.96	0.9	2.01	1.51
13. Disease of the musculoskeletal system and connetive tissue	12.58	18.74	13.5	10.34	8.57
14. Infuries and poisoning	7.76	10.09	8.55	4.31	10.08
15. Diseases of skin and subcutaneous tissues	0.76	0.96	0.45	1.15	0.5
16. Symptoms, signs, and ill-defined conditions and factors influencing health status	11.54	14.42	11.7	10.34	7.05

Incidence rate is presented per 1,000 person-years.

**Supplemental Table 2-1. Incidence rate of in-hospitalization of diabetic kidney disease**

Etiology	Total	G1	G2	G3a-G3b	G4-5	P-value
All-cause hospitalization	289.77	140.74	232.12	254.36	426.65	0.04
1. Acute kidney disease	19.7	-	9.41	12.57	43.71	0.04
2. Infections	21.14	12.79	21.96	17.41	29.73	0.17
3. Neoplasm	24.51	12.79	15.68	26.11	29.73	0.04
4. Endocrine-nutrition-metabolic-related cause	45.17	31.99	25.09	21.28	103.17	0.63
5. Diseases of blood and blood forming organs	2.4	-	-	2.9	3.5	0.045
6. Mental illness	5.29	-	21.96	0.97	5.25	0.38
7. Disease of the nervous system and sense organ	40.37	25.59	31.37	48.36	34.97	0.17
8. Diseases of circulatory system	55.26	19.19	47.05	49.33	80.43	0.04
9. Disease of respiratory tract	5.77	-	-	6.77	8.74	0.045
10. Disease of digestive system	17.3	6.4	21.96	14.51	22.73	0.17
11. Disease of genitourinary system	7.69	-	3.14	10.64	6.99	0.17
12. Complication of pregnancy	0.96	-	3.14	0.97	-	0.63
13. Disease of the musculoskeletal system and connective tissue	18.74	19.19	15.68	18.38	20.98	0.38
14. Injuries and poisoning	10.09	6.4	-	11.61	13.99	0.17
15. Diseases of skin and subcutaneous tissues	0.96	-	-	-	3.5	0.15
16. Symptoms, signs, and ill-defined conditions and factors influencing health status	14.42	6.4	15.68	12.57	19.23	0.17

Incidence rate is presented per 1,000 person-years. Incidence of admission by each category were compared by Jonckheere-Terpstra test as trend analysis. G, grade.

**Supplemental Table 2-2. Incidence rate of in-hospitalization of hypertensive kidney disease**

Etiology	Total	G1	G2	G3a-G3b	G4-5	P-value
All-cause hospitalization	169.71	53.17	141.57	139.07	317.96	0.17
1. Acute kidney disease	8.55	-	4.88	4.21	26.31	0.17
2. Infections	23.41	5.91	29.29	14.33	48.24	0.17
3. Neoplasm	23.41	17.72	24.41	19.39	35.08	0.17
4. Endocrine-nutrition-metabolic-related cause	8.10	5.91	2.44	4.21	24.12	0.38
5. Diseases of blood and blood forming organs	2.25	-	-	1.69	6.58	0.045
6. Mental illness	0.90	-	-	0.84	2.19	0.045
7. Disease of the nervous system and sense organ	18.46	5.91	21.97	18.54	19.74	0.38
8. Diseases of circulatory system	26.56	5.91	14.65	26.13	46.05	0.04
9. Disease of respiratory tract	2.25	-	4.88	1.69	2.19	0.38
10. Disease of digestive system	16.21	11.82	7.32	12.64	35.08	0.17
11. Disease of genitourinary system	4.50	-	2.44	6.74	2.19	0.38
12. Complication of pregnancy	0.90	-	-	-	4.39	0.15
13. Disease of the musculoskeletal system and connective tissue	13.50	-	9.76	14.33	19.74	0.04
14. Injuries and poisoning	8.55	-	4.88	8.43	15.35	0.04
15. Diseases of skin and subcutaneous tissues	0.45	-	2.44	-	-	0.63
16. Symptoms, signs, and ill-defined conditions and factors influencing health status	11.70	-	12.20	5.90	30.70	0.17

Incidence rate is presented per 1,000 person-years. Incidence of admission by each category were compared by Jonckheere-Terpstra test as trend analysis. G, grade.

**Supplemental Table 2-3. Incidence rate of in-hospitalization of glomerular disease**

Etiology	Total	G1	G2	G3a-G3b	G4-5	P-value
All-cause hospitalization	122.02	84.78	93.34	152.81	162.58	0.04
1. Acute kidney disease	7.46	1.16	1.11	13.07	16.06	0.17
2. Infections	12.35	17.42	6.67	12.26	14.05	0.63
3. Neoplasm	24.69	13.94	7.78	49.85	12.04	0.63
4. Endocrine-nutrition-metabolic-related cause	4.88	2.32	7.78	0.82	14.05	0.38
5. Diseases of blood and blood forming organs	0.86	-	-	1.63	2.01	0.045
6. Mental illness	-	-	-	-	-	-
7. Disease of the nervous system and sense organ	13.49	5.81	12.22	13.07	30.11	0.04
8. Diseases of circulatory system	12.06	3.48	20.00	13.07	10.04	0.63
9. Disease of respiratory tract	1.15	1.16	-	0.82	4.01	0.38
10. Disease of digestive system	8.61	6.97	4.44	12.26	10.04	0.38
11. Disease of genitourinary system	8.33	9.29	4.44	8.99	12.04	0.38
12. Complication of pregnancy	2.01	2.32	2.22	2.45	-	0.83
13. Disease of the musculoskeletal system and connective tissue	10.34	8.13	11.11	8.99	16.06	0.17
14. Injuries and poisoning	4.31	4.65	4.44	4.90	2.01	0.83
15. Diseases of skin and subcutaneous tissues	1.15	-	3.33	-	2.01	0.37
16. Symptoms, signs, and ill-defined conditions and factors influencing health status	10.34	8.13	7.78	10.62	18.06	0.17

Incidence rate is presented per 1,000 person-years. Incidence of admission by each category were compared by Jonckheere-Terpstra test as trend analysis. G, grade.

**Supplemental Table 2-4. Incidence rate of in-hospitalization of polycystic kidney disease**

Etiology	Total	G1	G2	G3a-G3b	G4-5	P-value
All-cause hospitalization	180.87	127.19	156.34	246.61	408.59	0.04
1. Acute kidney disease	7.56	3.82	4.84	10.91	33.35	0.04
2. Infections	48.37	26.71	53.19	56.74	133.42	0.04
3. Neoplasm	13.60	13.99	4.84	15.28	50.03	0.17
4. Endocrine-nutrition-metabolic-related cause	3.02	-	1.61	4.36	25.02	0.04
5. Diseases of blood and blood forming organs	-	-	-	-	-	-
6. Mental illness	0.50	1.27	-	-	-	0.85
7. Disease of the nervous system and sense organ	9.07	6.36	-	19.64	33.35	0.17
8. Diseases of circulatory system	25.19	21.62	25.79	32.74	16.68	0.63
9. Disease of respiratory tract	3.53	5.09	-	6.55	.	0.63
10. Disease of digestive system	20.15	7.63	24.18	32.74	33.35	0.04
11. Disease of genitourinary system	22.17	16.53	29.01	19.64	33.35	0.17
12. Complication of pregnancy	1.51	3.82	-	.	.	0.85
13. Disease of the musculoskeletal system and connective tissue	8.57	11.45	1.61	13.09	8.34	0.63
14. Injuries and poisoning	10.08	5.09	9.67	19.64	8.34	0.38
15. Diseases of skin and subcutaneous tissues	0.50	-	1.61	-	-	0.63
16. Symptoms, signs, and ill-defined conditions and factors influencing health status	7.05	3.82	-	15.28	33.35	0.17

Incidence rate is presented per 1,000 person-years. Incidence of admission by each category were compared by Jonckheere-Terpstra test as trend analysis. G, grade.